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### (54) SYSTEM AND METHOD FOR TRANSMITTING A FEED RELATED TO A FIRST USER TO A SECOND USER

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- (51) Int. Cl.

  G06F 17/22 (2006.01)

  G06F 17/30 (2006.01)

  G06F 17/27 (2006.01)

  G06Q 10/10 (2012.01)
- (52) **U.S. Cl.**

CPC ...... *G06F 17/30867* (2013.01); *G06F 17/2247* (2013.01); *G06F 17/279* (2013.01); *G06G 10/10* (2013.01)

(58) Field of Classification Search

USPC ........ 715/201, 202, 205, 226, 234, 273, 701, 715/738, 760, 861

See application file for complete search history.

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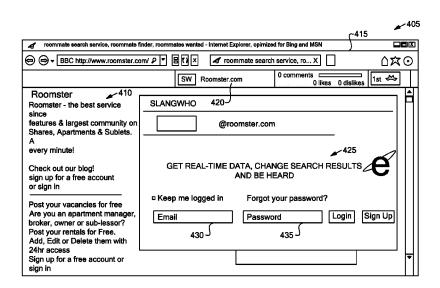
Primary Examiner — Maikhanh Nguyen

(74) Attorney, Agent, or Firm — Greenberg Traurig LLP

### (57) ABSTRACT

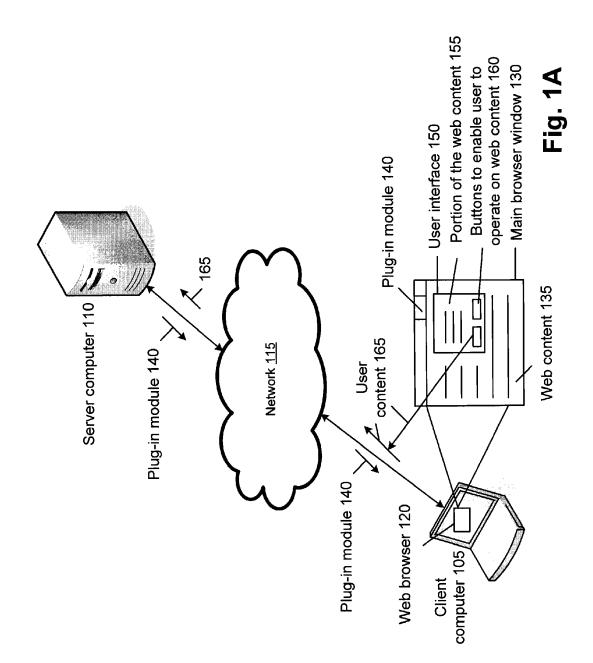
Disclosed is a server computer and method that provides a first user interface to a first client computer operated by a first user for display by a first web browser. The first web browser displays web content to the first user. The server computer provides a second user interface to a second client computer operated by a second user for display by a second web browser. The server computer receives a feed request from the second client computer of the second user for a feed related to the first user. The server computer transmits the feed related to the first user to the second client computer to enable the second user to receive at least a portion of the web content.

### 18 Claims, 17 Drawing Sheets



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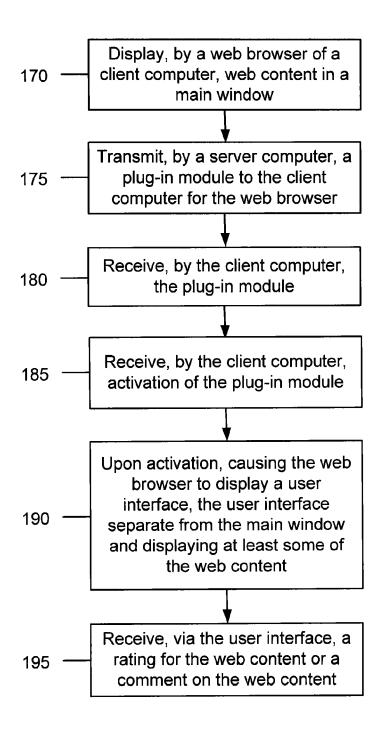
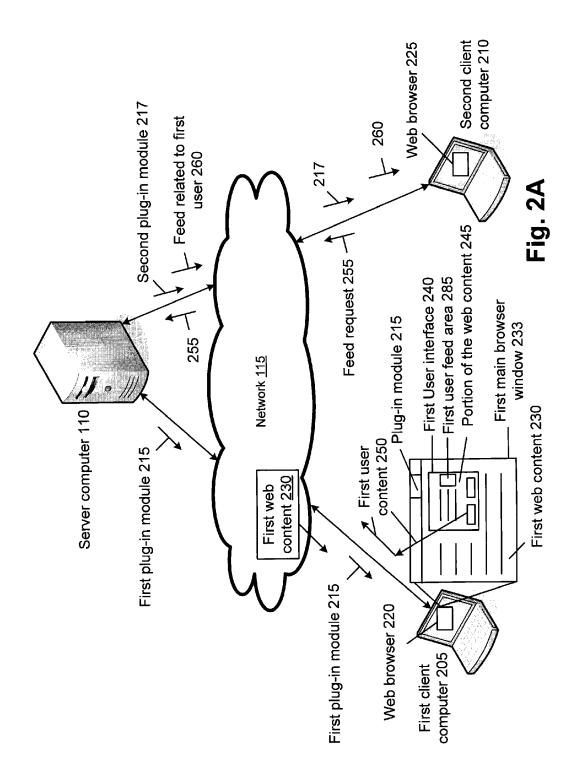


Fig. 1B



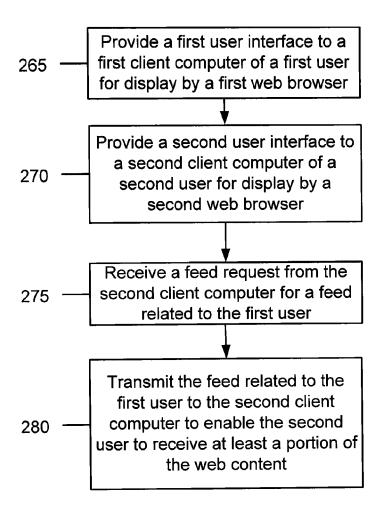


Fig. 2B

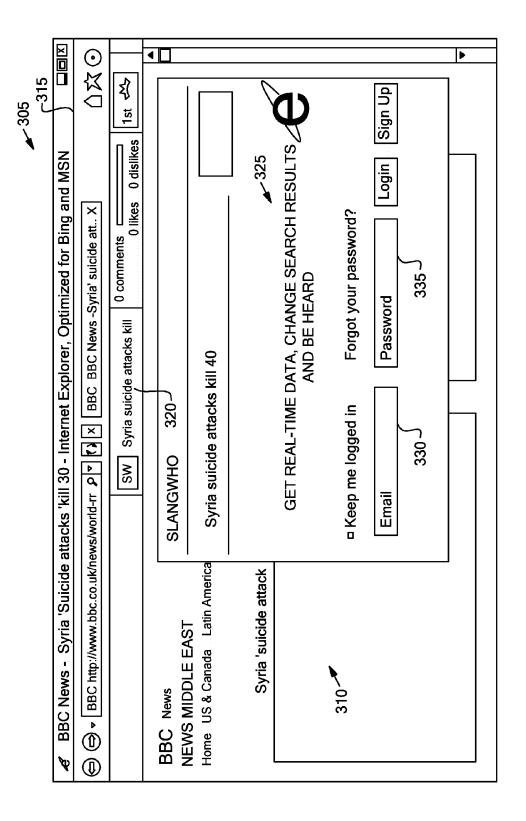


Fig. 3A

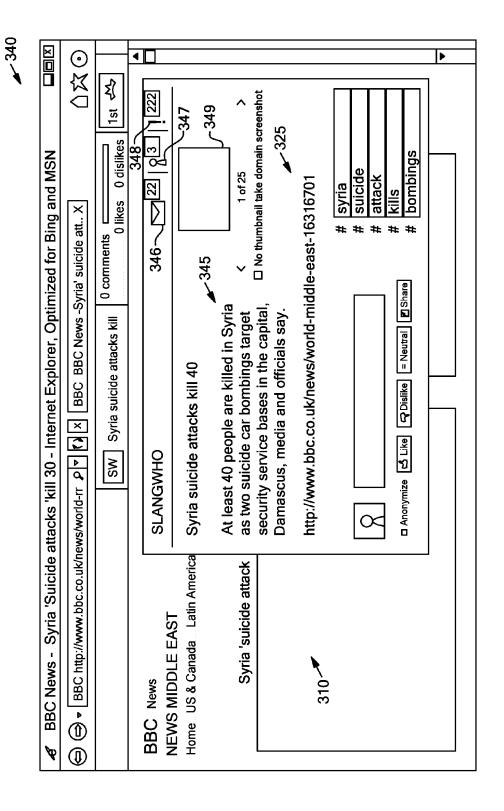


Fig. 3B

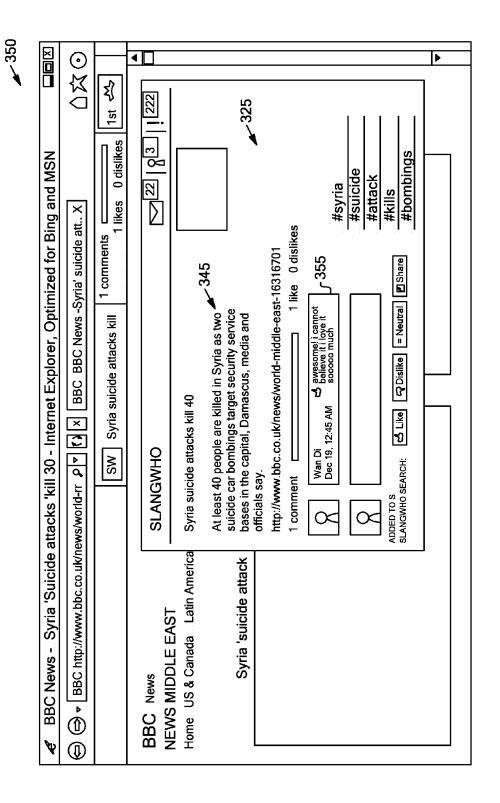


Fig. 30

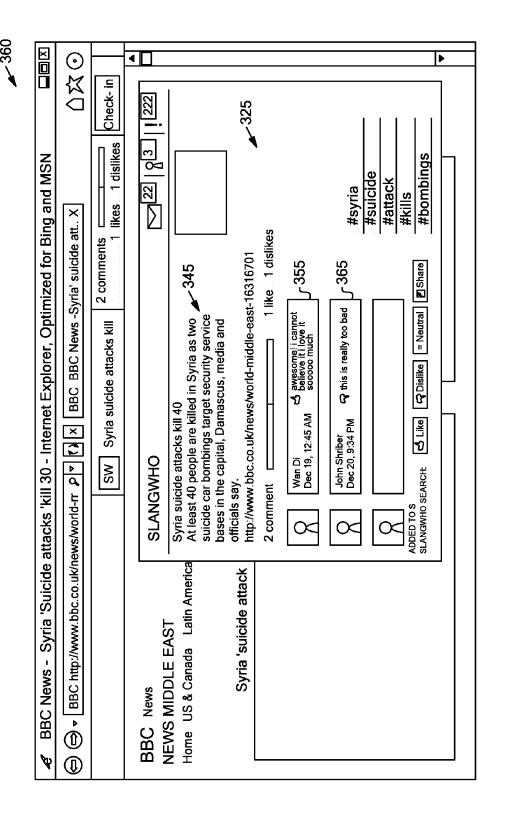


Fig. 3D

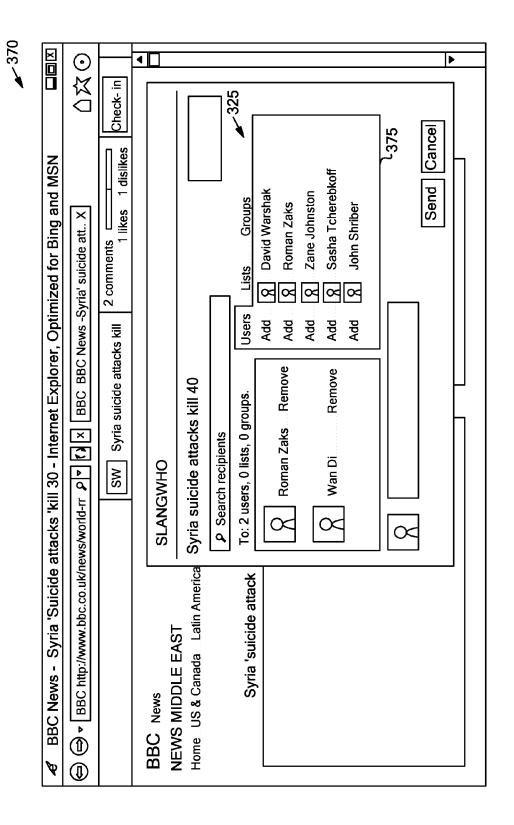


Fig. 3E

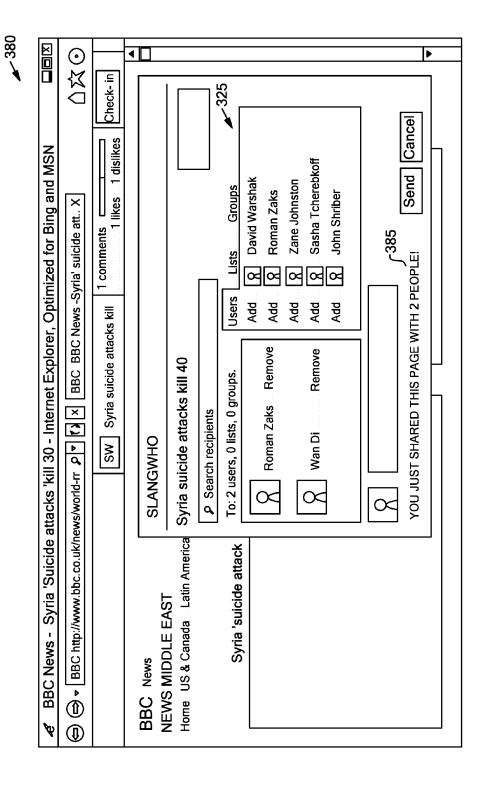


Fig. 3F

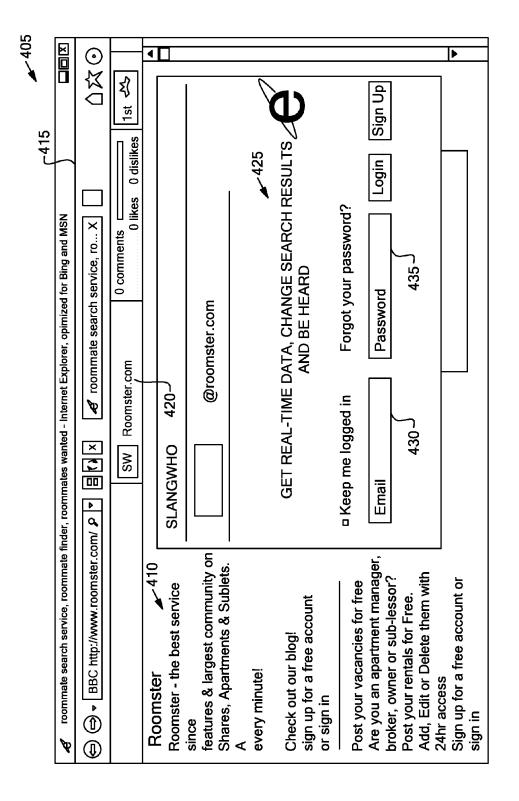


Fig. 4A

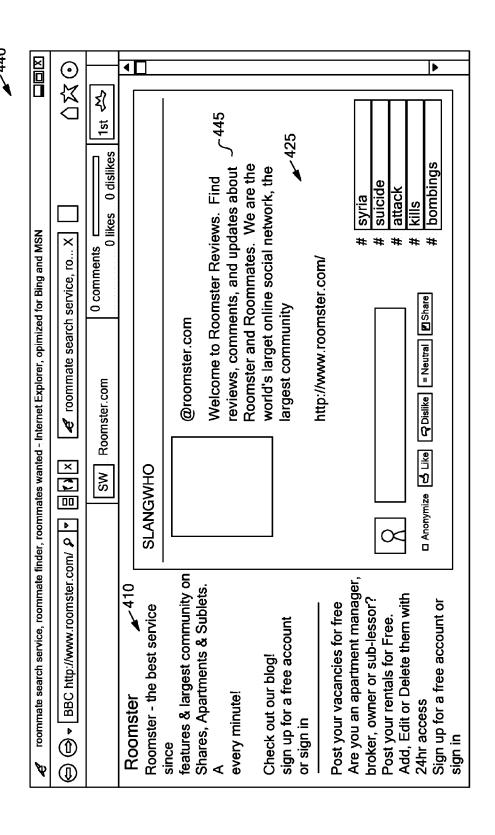


Fig. 4B

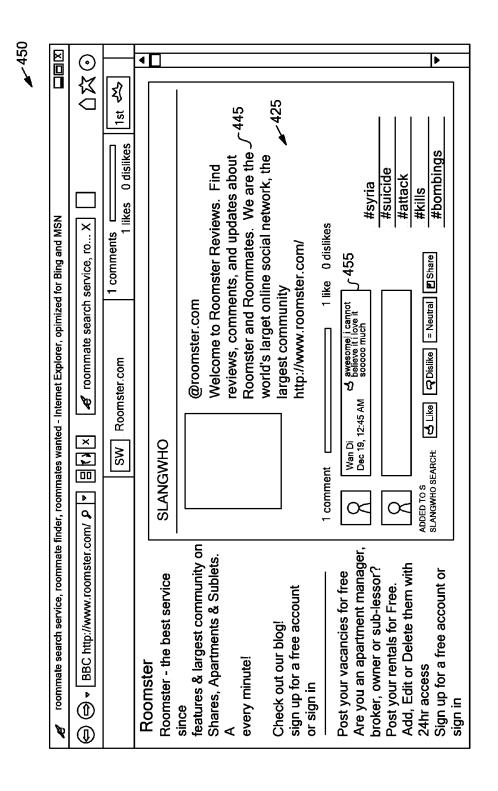


Fig. 4C

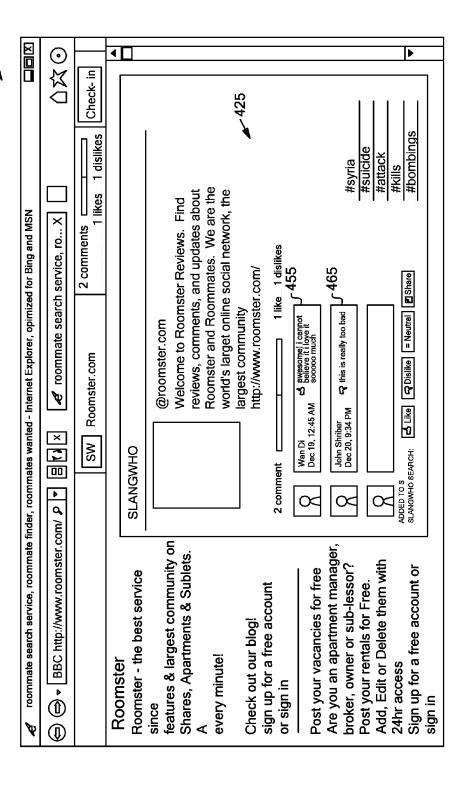


Fig. 4D

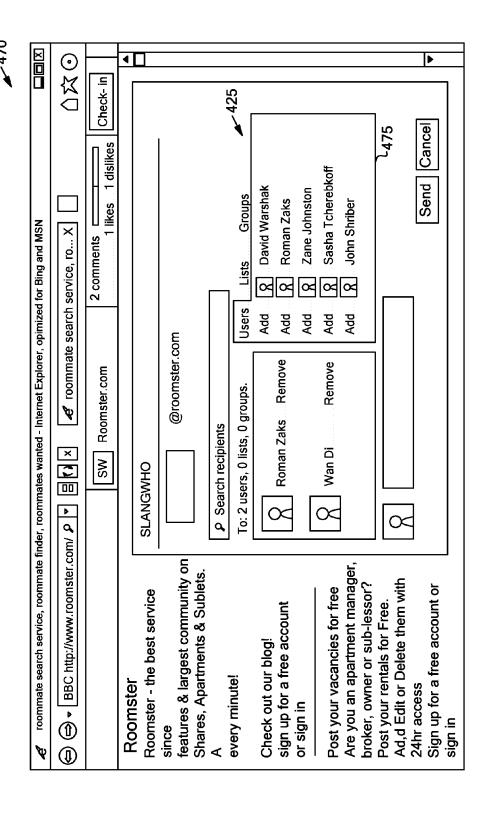


Fig. 4E

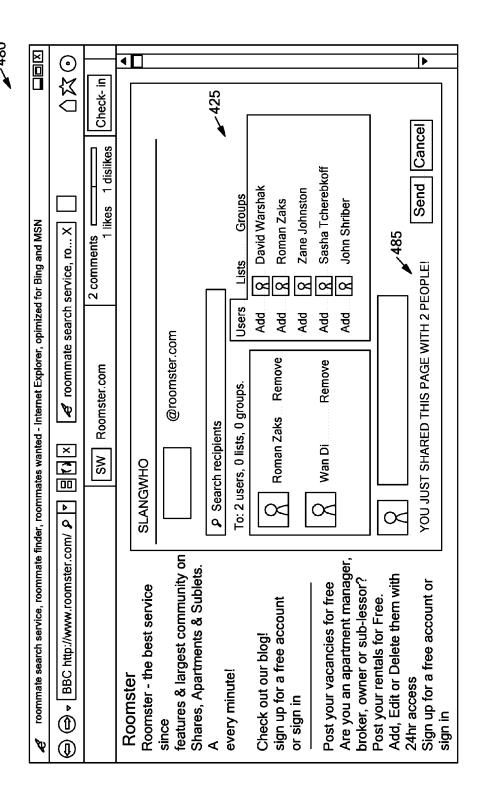


Fig. 4

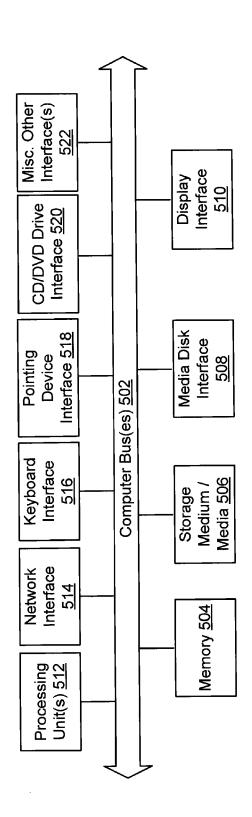


Fig. {

### SYSTEM AND METHOD FOR TRANSMITTING A FEED RELATED TO A FIRST USER TO A SECOND USER

### RELATED APPLICATIONS

This application claims the benefit of U.S. Provisional Application Ser. No. 61/452,595, filed Mar. 14, 2011, which is incorporated herein by reference in its entirety.

### **FIELD**

The present disclosure relates to online communication between a first user and a second user, and more specifically to transmitting a feed related to the first user to the second user.

### BACKGROUND

Web content accessible via the Internet includes web pages, videos, photographs, blogs, news, media, songs, etc. Communication about web content between individuals is typically done via email, blog post, or via a social networking site.

### **SUMMARY**

There remains a need, however, to enable real-time communication between a first user and a second user about web 30 content displayed by a web browser to enable the second user to receive at least some of the web content. Communication can include commenting on the web content, tips related to the web content, etc.

In one aspect, a server computer provides a first user interface to a first client computer operated by a first user for display by a first web browser. The first web browser displays web content to the first user. The server computer provides a second user interface to a second client computer operated by a second user for display by a second web browser. The server computer receives a feed request from the second client computer of the second user for a feed related to the first user. The server computer transmits the feed related to the first user to the second client computer to enable the second user to receive at least a portion of the web content.

In one embodiment, the transmitting of the feed related to the first user to the second client computer includes transmitting a newsfeed entry to the second client computer. In one embodiment, the providing of the first and/or second user interface includes providing a web page and/or a plug-in. In 50 one embodiment, the displaying of the web content includes displaying a webpage, an idea, a comment, and/or a digital photograph. In one embodiment, upon receiving the feed request from the second client computer for a feed related to the first user, the server computer immediately transmits, in 55 real time, the feed to the second client computer.

In one embodiment, the transmitting of the feed related to the first user to the second client computer to enable the second user to receive at least a portion of the web content includes enabling the second user to reply to the at least a 60 portion of the web content. In one embodiment, the transmitting of the feed related to the first user to the second client computer to enable the second user to receive at least a portion of the web content includes transmitting search results comprising the at least a portion of the web content to the first user. 65 In one embodiment, the server computer receives a follow request for the second user to follow the first user via the feed.

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These and other aspects and embodiments will be apparent to those of ordinary skill in the art by reference to the following detailed description and the accompanying drawings.

### BRIEF DESCRIPTION OF THE DRAWINGS

In the drawing figures, which are not to scale, and where like reference numerals indicate like elements throughout the several views:

FIG. 1A is a block diagram of a client computer communicating with a server computer over a network in accordance with an embodiment of the present disclosure;

FIG. 1B is a flowchart illustrating operations performed by the server computer and the client computer to enable a user of the client computer to operate on web content displayed by the client computer in accordance with an embodiment of the present disclosure;

FIG. 2A is a block diagram of a first client computer and a second client computer communicating with the server computer in accordance with an embodiment of the present disclosure:

FIG. 2B is a flowchart illustrating operations performed by the server computer to transmit a feed to the second client computer in accordance with an embodiment of the present disclosure:

FIGS. 3A-3F are exemplary screen shots of a user interface and a plug-in module when a web page is added to the server computer via the plug-in module in accordance with an embodiment of the present disclosure;

FIGS. 4A-4F are exemplary screen shots of the user interface and the plug-in module when a web site is added to the server computer via the plug-in module in accordance with an embodiment of the present disclosure; and

FIG. 5 is a block diagram illustrating an internal architecture of a computer in accordance with an embodiment of the present disclosure.

### DESCRIPTION OF EMBODIMENTS

Embodiments are now discussed in more detail referring to the drawings that accompany the present application. In the accompanying drawings, like and/or corresponding elements are referred to by like reference numbers.

Various embodiments are disclosed herein; however, it is to be understood that the disclosed embodiments are merely illustrative of the disclosure that can be embodied in various forms. In addition, each of the examples given in connection with the various embodiments is intended to be illustrative, and not restrictive. Further, the figures are not necessarily to scale, some features may be exaggerated to show details of particular components (and any size, material and similar details shown in the figures are intended to be illustrative and not restrictive). Therefore, specific structural and functional details disclosed herein are not to be interpreted as limiting, but merely as a representative basis for teaching one skilled in the art to variously employ the disclosed embodiments.

The present disclosure is described below with reference to block diagrams and operational illustrations of methods and devices to select and present media related to a specific topic. It is understood that each block of the block diagrams or operational illustrations, and combinations of blocks in the block diagrams or operational illustrations, can be implemented by means of analog or digital hardware and computer program instructions. These computer program instructions can be provided to a processor of a general purpose computer, special purpose computer, ASIC, or other programmable data processing apparatus, such that the instructions, which

execute via the processor of the computer or other programmable data processing apparatus, implements the functions/ acts specified in the block diagrams or operational block or blocks.

In some alternate implementations, the functions/acts 5 noted in the blocks can occur out of the order noted in the operational illustrations. For example, two blocks shown in succession can in fact be executed substantially concurrently or the blocks can sometimes be executed in the reverse order, depending upon the functionality/acts involved. Furthermore, 10 the embodiments of methods presented and described as flowcharts in this disclosure are provided by way of example in order to provide a more complete understanding of the technology. The disclosed methods are not limited to the operations and logical flow presented herein. Alternative 15 embodiments are contemplated in which the order of the various operations is altered and in which sub-operations described as being part of a larger operation are performed independently.

Throughout the specification and claims, terms may have 20 nuanced meanings suggested or implied in context beyond an explicitly stated meaning Likewise, the phrase "in one embodiment" as used herein does not necessarily refer to the same embodiment and the phrase "in another embodiment" as used herein does not necessarily refer to a different 25 embodiment. It is intended, for example, that claimed subject matter include combinations of example embodiments in whole or in part.

In general, terminology may be understood at least in part from usage in context. Fore example, terms, such as "and", 30 "or", or "and/or," as used herein may include a variety of meanings that may depend at least in part upon the context in which such terms are used. Typically, "or" if used to associate a list, such as A, B, or C, is intended to mean A, B, and C, here used in the inclusive sense, as well as A, B, or C, here used in 35 the exclusive sense. In addition, the term "one or more" as used herein, depending at least in part upon context, may be used to describe any feature, structure, or characteristic in a singular sense or may be used to describe combinations of features, structures or characteristics in a plural sense. Simi- 40 larly, terms, such as "a," "an," or "the," again, may be understood to convey a singular usage or to convey a plural usage, depending at least in part upon context. In addition, the term "based on" may be understood as not necessarily intended to convey an exclusive set of factors and may, instead, allow for 45 existence of additional factors not necessarily expressly described, again, depending at least in part on context.

FIG. 1A is a block diagram of an embodiment of a client computer 105 communicating with a server computer 110 over a network 115 such as the Internet. A user uses a web 50 browser 120 on the client computer 105 to access the Internet. In one embodiment, a web page is transmitted via the network 115 to the client computer 105 for display by the web browser 120 in a main browser window 130. The web browser 120 displays web content 135 in the main window 130 of the web 55 browser 120. The web content 135 is generally received from a third party server different from the server computer 110 without going through the server computer 110. The third party server is generally independent from the server computer 110; and the presentation of the web content from the 60 third party server to the web browser 120 is made without a reference to the server computer 110. However, the techniques described herein also apply to the scenario in which the web content 135 is from the server computer 110.

In one embodiment, the client computer **105** submits a 65 request to the server computer **110** (e.g., via the web content **135**) for a plug-in module **140**. The plug-in module **140** may

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be associated with the web content 135, may be associated with another web page, and/or may be associated with a displayed advertisement. The server computer 110 transmits the plug-in module 140 to the browser 120 (to install the plug-in module 140 on the browser 120). In one embodiment, the plug-in module 140 is installed on the browser to present a user interface element such as a button on a toolbar of the web browser 120 (e.g., the browser toolbar or a third party toolbar) or a menu item in the browser 120, etc.

The user of the client computer 105 can activate the plug-in module 140 by, for example, selecting the button for the plug-in module 140 (e.g., via a mouse cursor, touching the button, speaking a command, etc.). In one embodiment, upon activation, the plug-in module 140 causes the web browser 120 to display a user interface 150 separate from the main browser window 130 (e.g., a pop-up window). In one embodiment, the user interface 150 displays at least a portion of the web content 155 to the user and enables the user to operate on the displayed web content 155 (and, e.g., generate user content associated with the web content 135, such as a rating, comment, etc. as described below). In one embodiment, the user interface 150 includes one or more buttons 160 to enable the user to operate on the portion of the web content 155. In one embodiment, the plug-in module 140 transmits user content 165 to the server computer 110 (e.g., for indexing).

For purposes of this disclosure, a computer such as the client computer 105 includes a processor and memory for storing and executing program code, data and software. Computers can be provided with operating systems that allow the execution of software applications in order to manipulate data. Client computer 105 can be any device that can display a website and that can be used by a user. Personal computers, servers, personal digital assistants (PDAs), wireless devices, smartphones, cellular telephones, tablet computers, internet appliances, media players, home theater systems, and media centers are several non-limiting examples of computers.

For the purposes of this disclosure, the term "server" should be understood to refer to a service point which provides processing, database, and communication facilities. By way of example, and not limitation, the term "server" can refer to a single, physical processor with associated communications and data storage and database facilities, or it can refer to a networked or clustered complex of processors and associated network and storage devices, as well as operating software and one or more database systems and applications software which support the services provided by the server. A number of program modules and data files can be stored on a computer readable medium of the server. They can include an operating system suitable for controlling the operation of a networked server computer, such as the WINDOWS 7, WIN-DOWS VISTA, or WINDOWS XP operating system published by Microsoft Corporation of Redmond, Wash., or the Ubuntu operating system distributed by Canonical Ltd. of Douglas, Isle of Man.

In one embodiment, the server computer 110 is a group of servers, such as one server to receive the submitted user content transmitted from the plug-in module 140 and a second server configured to download/install the plug-in module 140 into the user's web browser 120. In another embodiment, server computer 110 performs both of these functions. In one embodiment, a third server may be present in FIG. 1A representing a third party web server on the Internet (e.g., an online newspaper site, a blog, etc.) that is separate and distinct from server computer 110.

FIG. 1B is a flowchart illustrating an embodiment of operations performed by the server computer 110 and the client computer 105 to enable a user of the client computer 105 to

operate on web content displayed by the browser 120. The user uses the web browser 120 to view and/or listen to web content 135, such as a web page, an audio file, a video, a post, a media file, etc., in main browser window 130 (Operation 170). In one embodiment, the plug-in module 140 is installed prior to and independent from the web content 135; the installation of the plug-in module 140 and its operation requires no prior arrangement made in the web content 135; and thus, the plug-in module 140 can work with any web content 135 found in the web. Alternatively, the web content 135 (e.g., a web page associated with the server computer 110) enables the user to install plug-in module 140. In another embodiment, the web page 135 is a third party web page that includes an advertisement to install the plug-in module 140.

The server computer 110 transmits the plug-in module 140 15 to the web browser 120 of the client computer 105 (Operation 175) and the client computer 105 receives the plug-in module 140 (Operation 180). In one embodiment, the plug-in module 140 allows the user to remotely log into the server computer 110. Upon activation of the plug-in module 140 (Operation 20) 185), the plug-in module 140 causes the web browser 120 to display user interface 150 separate from the main window 130. In one embodiment, the user interface 150 displays at least a portion of the web content 155 that the web browser 120 is displaying in its main window 130 (Operation 190). 25 For example, the user interface 150 can display representative information of the web content 135, such as a picture, an icon, a sentence, and/or a paragraph in the portion of the web content 155. In one embodiment, the user interface 150 displays notifications, comments, or reviews from other users 30 who have downloaded the plug-in module 140.

In one embodiment, the user interface 150 automatically selects for display the portion of the web content 155 from the received web content 135. Further, in one embodiment the user of the client computer 105 can provide settings as to what 35 the user interface 150 will display when web content 135 is displayed in the web browser 120 (e.g., display the first few sentences of the web content 135, display the first graphic and first few sentences of web content 135, display the entire web page 135, etc.)

The plug-in module 140 enables the user to operate on the web content 155. For example, the user can submit a rating for the web content 155 or a comment on the web content 155 (Operation 195) (e.g., user content 165). In one embodiment, the user interface 150 enables the user to post the portion of 45 the web content 155 to a social networking site (e.g., FACE-BOOK®). In one embodiment, the user interface 150 displays current discussions related to the web content 155 and enables the user to add the web content 135 to a search engine associated with the server computer 110. In one embodiment, 50 the user can use the user interface 150 to adjust (e.g., add web content to or remove web content from) the portion of the web content 155 displayed by the user interface 150. For example, the plug-in module 140 can transmit the URL of the web content 135 to the server computer 110. The server computer 55 110 can update what is displayed by or the amount of web content 155 displayed by the user interface 150. In one embodiment, the plug-in module 140 prompts the user to add the web page 135 to the server computer's index so that the web page 135 will be present in future search results. The 60 plug-in module 140 may transmit the URL of the web page 135 to the server computer 110 (which can then extract the web content 135), may transmit the entire web page 135 to the server computer 110, or may transmit a portion of the web page 135 to the server computer 110. In one embodiment, the 65 server computer 110 (or the plug-in module 140) grabs the web page's meta-tags, thumbnail, title, and/or text of the web

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page 135. In one embodiment, the plug-in module 140 allows the user to add web content 135 (e.g., a web page) to the server computer 110, such as via the user interface 150, a pop-up window, a menu option, right-clicking the webpage itself, via the browser 120, etc. In one embodiment, the plug-in module 140 enables the user to change the web content's tags in case the meta-tags are inaccurate.

Thus, the user interface 150 enables the user to provide information/content about a third party web page 135 to a web page associated with the plug-in module 140 (and server computer 110) while the third party web page 135 is displayed in web browser 120. This information/user content 165 can include one or more comments, tips, a rating for the web content 155 (e.g., a score for the web content 155), an indication that the user likes or dislikes the web content 155, a recommendation for or on the web content 155, and/or a tag for the web content 155. Further, the user interface 150 can enable the user to attach content to the web content 155, share the web content 155 with others, etc.

The plug-in module 140 allows the user to act on any web page that is currently being viewed by the user and, in one embodiment, transmits the user-created content (e.g., comments and ratings) in association with an identification of the web content to the server computer 110. After the plug-in module 140 is installed on the web browser 120 (e.g., via an installation web page that directs the user to download the plug-in module 140 for installation), the user can visit any third party web site and click a button associated with the plug-in module 140 to create user content in association with the third party web site and submit the user content to the server computer 110. The user does not have to visit the web site through the plug-in module 140 or user interface 150 but rather can navigate to the web site using the user's web browser 120. In one embodiment, the plug-in module 140 can be implemented as a built-in module of the web browser 120 (e.g., shipped by Microsoft Corporation as a built-in component of INTERNET EXPLORER®).

Thus, when a user is looking at a web page (e.g., a news article or a blog entry), and if the user is interested in acting upon it (e.g., to share it, to submit it to the server computer 110 for indexing, or to rank or comment on it), the user can click on the plug-in module button and then work on the user interface 150 that, in one embodiment, populates some of the fields automatically by automatically taking those contents (e.g., snippets) from the web page 135 that the user is currently looking at (e.g., thumbnail image, the lead sentence, etc.). There is no need for any prior arrangement between the web page being acted upon and the plug-in module 140/server computer 110.

For example, a blog-related service may use such a plug-in module 140 to assist the blog author that blogs on news articles. When looking at the news article, the user clicks the plug-in button and the user interface 150 shows the blog template that has many fields pre-populated with content from the news article (e.g., a thumbnail icon image, a lead sentence, etc.). Thus, the user does not have to perform the copy and paste manually. The user can work on the user interface 150 to compose the remaining part of the blog entry about the news article, such as rating, comments, etc.

In one embodiment, the user interface 150 displays advertisements to the user, such as for one or more products. In one embodiment, the advertisements are transmitted to the browser 120 by the server computer 110. Alternatively, a third party advertisement server can transmit advertisements to the user interface 150 for display. In one embodiment, the advertisements may be related to the portion of the web content 155 displayed by the user interface 150. The user interface 150

can also display statistics. For example, the user interface 150 can display statistics associated with the portion of the web content 155, statistics associated with the user (e.g., number of days since the user has downloaded the plug-in module 140, amount of web content that the user has commented on, 5 amount of web content that the user has shared, amount of web content that the user has rated or ranked, number of and/or which other users the user has followed, number of and/or which other users have followed the user, etc.), statistics about the user interface 150, statistics about the plug-in 10 module 140, statistics about other users associated with the plug-in module 140 (e.g., the number of users who have downloaded the plug-in module 140 and/or the number of users who have downloaded the plug-in module 140 and who have currently activated the plug-in module 140 to view a 15 corresponding user interface), and/or statistics about any other information.

In one embodiment, the user interface 150 displays advertisements that are posted by other users who have downfor example, an advertisement for a roommate, an advertisement to sell or buy a product, a classified jobs section, a dating section, etc. Thus, in one embodiment, a product manager at company XYZ can post a job position that is available at XYZ to the users of the plug-in module 140. As another example, 25 suppose one user is using his web browser 120 to search for a new television set. In one embodiment, the plug-in module 140 can detect the user's searching and post an advertisement for a TV that another user in the community (e.g., another user who has downloaded the plug-in module 140) is selling.

For each web item (web content) (e.g., a web site, a video, a web page) hosted on the web/internet (typically not on the server computer 110), the server computer 110 allows its users to create user content 165, which typically includes a snippet or portion of the web content 155 (such as one or 35 sentences from the web content 135, one or more thumbnail images of the web content 135, etc.). The snippet 155 is not generated until a user submits it to the server via the plug-in module 140. The user content 165 may further include a set of tags/keywords. The plug-in module 140 and/or the server 110 40 may automatically select the snippet and the tags/keywords 155 for the user, by processing the web content 135 in an automated way. The snippet and/or the tags/keywords 155 suggested by the plug-in module 140 and/or the server computer 110 may be modified by the user via the user interface 45 150 of the plug-in module 140. The snippet 155 is stored on the server computer 110 (as part of the user content 165 associated with the web content 135); and in one embodiment the user content 165 has a link to the web content 135, which allows the users of the server computer 110 to follow the link 50 to see the actual/current version of the web content 135 that is on the web (typically not on the server computer 110). One or more users can add additional contents to the "user content" 165 associated with the web content 135, such as a vote/ rating, and a comment. The first user submitting the snippet 55 and/or tags/keywords can submit this information with his/ her rating/vote and comment.

FIG. 2A is a block diagram of an embodiment of a first client computer 205 and a second client computer 210 communicating with the server computer 110 over network 115. 60 FIG. 2B is a flowchart of an embodiment of operations performed by the server computer 110. As described above, in one embodiment the plug-in module 215, 217 is transmitted to web browser 220 of the first client computer 205 and web browser 225 of the second client computer 210, respectively. 65 Each web browser 220, 225 is displaying web content (e.g., the first web browser 220 is displaying first web content 230)

as described above in a main browser window (e.g., first main browser window 233). In one embodiment, the user of the first client computer 205 activates plug-in module 215, which in turn results in a corresponding first user interface 240 being displayed. Alternatively, the first user interface 240 is displayed in a web page served by the server computer 110. The first user interface 240 displays a portion of the web content 245. As described above, the user of the first client computer 205 can act upon the first web content 230 displayed by the web browser 220 of the first client computer 205 to generate first user content 250.

As described above, the server computer 110 provides a first user interface 240 to the first client computer 205 of the first user for display by the first web browser 220 (Operation **265**). The server computer **110** also provides a second user interface to the second client computer 210 of a second user for display by the second web browser 225 (Operation 270).

In one embodiment, the user interfaces (e.g., first user loaded the plug-in module 140. The advertisements can be, 20 interface 240) provides a way for users to instantly (in realtime) share information that one user believes would be of special interest to another user. This may be done via feeds. Feeds can be used to alert other users of, for example, webpages, shared (ideas), tips, and photos. In one embodiment, the user interface takes a newsfeed entry and redirects it to another user's feed. In one embodiment, comments that are entered in a feed are updated (e.g., regularly), and entered comments can be found in a webpage discussion page. In one embodiment, the server computer 110 (user interface) does not generate duplicate entries.

> In one embodiment, the second user submits a feed request 255 for a feed related to the first user to the server computer 110. The server computer 110 receives the feed request (Operation 275). In one embodiment, the server computer 110 transmits the feed related to the first user 260 to the second client computer 210 to enable the second user to receive at least a portion of the first web content 230 (Operation 280) (e.g., a thumbnail version of a picture from the web content, a sentence from the web content, and/or a link to or in the web content). The feed can be sent in search results, newsfeed, and in a plug-in pop-up displayed by the user interface of the second client computer 210. In another embodiment, the users are provided with access to reply to the feed(s); and thus users can start a conversation using the feed(s). The feed(s) serve as a way to communicate between a selected group of people. Users may also subscribe to certain tags to receive feeds that are generated via an automatic search of the fol-

> In one embodiment, the transmitting of the feed related to the first user to the second client computer 210 to enable the second user to receive at least a portion of the web content further includes enabling the second user to reply to the at least a portion of the web content. In one embodiment, the transmitting of the feed includes transmitting search results including the at least a portion of the web content to the second user.

> In one embodiment, the feed is transmitted to the second user interface in real-time when the second user has activated his corresponding user interface (e.g., has logged in or is displaying the user interface). In another embodiment, if the second user has not activated his user interface (e.g., via the plug-in module), the server computer 110 stores the feed and pushes the feed to the second client computer 210 when the second user activates the second user's plug-in module. Thus, in one embodiment the feed is similar to instant messaging and email. The presentation, in one embodiment, is similar to blog postings in blogs.

In one embodiment, the user interface enables a user to follow another user. For example, if the second user follows the first user, certain content of the first user is fed to the second user via a feed. In one embodiment, permissions are used for users as a way for users to control who can interact 5 with them and how. Users may register to follow other people to populate their feeds with relevant information. However, should a user find that another user that he/she is following to be too much of an annoyance for any reason, that user can block the user he/she is following in a number of ways. One 10 way is to block the feed, which prevents the activities of a user that he/she is following from showing up on the feed. Another way a user can block another person is if the user finds a particular person's communications unwanted or an annoyance. A further way is messaging. In one embodiment, any 15 user can message another user via the user interface. However, this can be a gateway to spamming, so by limiting the ability to message certain users, it can help create a better user experience

In one embodiment, the user interface includes a feed area 20 (e.g., first user feed area 285) where a user can receive realtime information of what his/her followers are doing. For example, for webpage entries, users can rate, comment, and/ or find external links to the pages in this feed area. In one embodiment, there are two types of ratings—thumbs up 25 (positive) and thumbs down (negative). In one embodiment, ratings can only be added once per user, per page/site/photo. A positive rating raises the page/site/photo's calculated score, which can cause it to appear higher in search results. This allows the users to directly decide what shows up in the 30 highest positions in the search results. A negative rating lowers the page/site/photo's calculated score, which can cause it to appear lower in the search results. This allows the users to directly decide what shows up in the lowest positions in the search results.

Commenting on an entry in a feed allows a user to express their opinion. In one embodiment, commenting can be done multiple times per user. In one embodiment, all pages and photos displayed in the feed area are linked directly to their respective discussion pages. Any comments posted on the 40 feed area about the websites, webpages, photos, and albums can be updated on their respective discussion pages.

In one embodiment, if another user finds a comment particularly helpful, he/she can give the comment a positive rating. Similarly, in one embodiment, if another user finds a 45 comment not particularly helpful, he/she can give the comment a negative rating. In one embodiment, a user can sort the way his feed area displays information.

In one embodiment, if a second user uses second client computer 210 that has the plug-in installed to visit the web 50 content that has an associated user content (e.g., a snippet, a set of votes by different users and comments) in the server computer, the browser plug-in module shows the availability of the user content (e.g., the numbers of comments the server computer 110 stores for the web content displayed in the main 55 window and the counts of up votes and down votes) and the second user can click on the browser plug-in module to activate a user interface to view the user content and/or provide additional user content.

The second user may use a search page of the server computer and/or the user interface of the plug-in module to search, based on the tags, to discover the web content and then view the user content using the plug-in module.

In one embodiment, the first user of the first user interface 240 may directly request the server computer 110 to feed the 65 user content to a set of other users identified by the first user, such as the user of the second client computer 210. When the

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second client computer 210 is in a feed user interface, the server computer 110 and/or the plug-in module of the second client computer 210 automatically presents available feeds of user contents to the second user of the second client computer 210. The server computer 110 may automatically push feeds to the feed user interface (feed area), as soon as the feed content becomes available or updated. Alternatively, the feed user interface (feed area) may periodically check with the server computer 110 for updates and/or new feeds.

The available feeds include the user content that is explicitly identified by other users (e.g., the first user of the first client computer 205) for sharing with the second user, implicitly identified by the second user via subscription to tags identified by the second user, or implicitly identified by the second user via following one or more other users (e.g., the first user as a friend who accepts the request from the second user to follow the first user). When the second user follows the first user, the user contents of interest to the first user are fed to the second user in the feed user interface (feed area) (e.g., presented via activating the plug-in module). For example, the user contents related to the web content that are commented on, voted on, and/or discovered/submitted by the first user to the server computer 110 can be fed to the second user, if the second user follows the first user, as indicated by the user following data stored in the server computer 110. In one embodiment, different types of user contents (e.g., explicitly shared by the first user to the second user, implicitly shared via following the first user, and implicitly identified via subscription to tags) are presented in different sections of the feed user interface (feed area). Duplicated items are eliminated from the sections, based on a predetermined priority (e.g., if an item is presented in the explicit shared section, the item is not show in other sections).

When a first user explicitly requests the sharing of a user content with a second user in connection with web content, the server computer 110 generates a feed in response to the user request and makes the feed available as a real time response to the user request.

When a user content is created or updated for a web item (web content), the server computer 110 checks tag subscription data to create new feeds in real time with the creation or updating of the user content (for feeding to users who subscribe to a tag assigned to the web item); in addition, the server computer 110 checks the user following data to create new feeds in real time with the creation or updating of the user content (for feeding to users who follow 1) the user who created or updated the web item and/or 2) the users who subscribed to tags to receive a feed of the user content).

FIGS. 3A-3F are exemplary screen shots of the user interface and the plug-in module when a web page is added to the server computer 110 (e.g., added to be indexed for search results) via the plug-in module. In FIG. 3A, screen shot 305 shows web content 310 being displayed by web browser 315. The user has activated the plug-in module via plug-in module button 320, which results in user interface 325 being displayed. Screen shot 305 shows the user interface 325 enabling the user to log in via log-in input areas 330, 335. FIG. 3B shows a screen shot 340 illustrating the user interface 325 that includes a portion of the web content 345 associated with web content 310. The user in screen shot 340 can enter in a comment relating to the portion of the web content 345. In FIG. 3B, the envelop icon 346 with the number (22) may be an interface to open the section to see the explicitly shared feeds; the person icon 347 with the number (3) may be related to the user interface for following other users (and/or feeds via following); and the "!" icon 348 with the number (222) may be for feeds or for feeds via subscription to tags. In FIG. 3B,

the thumbnails of all pictures are arranged in a slide show mode 349 to allow the user to view the pictures one at a time. The option below the slide show allows the user to select an alternative way to present the web page visually: generating a domain screenshot of the web page, instead of creating the 5 thumbnail images of pictures in the web page (some web pages may not have a picture). The option to the left of the "like" voting button can be selected to submit the user content anonymously. The comment of the user submitted anonymously will be shown to others without revealing the identity of the user who requested to submit the comment with the "anonymize" option.

FIG. 3C shows a screen shot 350 that includes user interface 325 having a comment 355 from the user about the portion of the web content 345. The user has indicated that 15 he/she "likes" the web content 345. FIG. 3D is a screen shot 360 of user interface 325 displaying two comments, the like comment 355 and a dislike comment 365. FIG. 3E shows a screen shot 370 with user interface 325 displaying contacts 375 that the user can share the web content 345 with. FIG. 3F 20 shows a screen shot 380 with user interface 325 indicating via notification 385 that the user has shared the web content 345 with two people.

FIGS. 4A-4F are exemplary screen shots of the user interface and the plug-in module when a web site is added to the 25 server computer 110 (e.g., added to be indexed for search results) via the plug-in module. In FIG. 4A, screen shot 405 shows web site 410 being displayed by web browser 415. The user has activated the plug-in module via plug-in module button 420, which results in user interface 425 being dis- 30 played. Screen shot 405 shows the user interface 425 enabling the user to log in via log-in input areas 430, 435. FIG. 4B shows a screen shot 440 illustrating the user interface 425 that includes a portion of the web site content 445 associated with web site 410. The user in screen shot 440 can enter in a 35 comment relating to the portion of the web content 445. FIG. 4C shows a screen shot 450 that includes user interface 425 having a comment 455 from the user about the portion of the web site content 445. The user has indicated that he/she "likes" the web site content 445. FIG. 4D is a screen shot 460 40 of user interface 425 displaying two comments, the like comment 455 and a dislike comment 465. FIG. 4E shows a screen shot 470 with user interface 425 displaying contacts 475 that the user can share the web site content 445 with. FIG. 4F shows a screen shot 480 with user interface 425 indicating via 45 notification 485 that the user has shared the web site content 445 with two people.

FIG. 5 is a block diagram illustrating an internal architecture of an example of a computer, such as server computer 110 and/or client computer 105, in accordance with one or more 50 embodiments of the present disclosure. A computer as referred to herein refers to any device with a processor capable of executing logic or coded instructions, and could be a server, personal computer, set top box, smart phone, pad computer or media device, to name a few such devices. As 55 shown in the example of FIG. 5, internal architecture 500 includes one or more processing units (also referred to herein as CPUs) 512, which interface with at least one computer bus 502. Also interfacing with computer bus 502 are persistent storage medium/media 506, network interface 514, memory 60 504, e.g., random access memory (RAM), run-time transient memory, read only memory (ROM), etc., media disk drive interface 508 as an interface for a drive that can read and/or write to media including removable media such as floppy, CD-ROM, DVD, etc. media, display interface 510 as inter- 65 face for a monitor or other display device, keyboard interface 516 as interface for a keyboard, pointing device interface 518

as an interface for a mouse or other pointing device, and miscellaneous other interfaces not shown individually, such as parallel and serial port interfaces, a universal serial bus (USB) interface, and the like.

Memory 504 interfaces with computer bus 502 so as to provide information stored in memory 504 to CPU 512 during execution of software programs such as an operating system, application programs, device drivers, and software modules that comprise program code, and/or computer-executable process operations, incorporating functionality described herein, e.g., one or more of process flows described herein. CPU 512 first loads computer-executable process operations from storage, e.g., memory 504, storage medium/media 506, removable media drive, and/or other storage device. CPU 512 can then execute the stored process operations in order to execute the loaded computer-executable process operations. Stored data, e.g., data stored by a storage device, can be accessed by CPU 512 during the execution of computer-executable process operations.

Persistent storage medium/media **506** is a computer readable storage medium(s) that can be used to store software and data, e.g., an operating system and one or more application programs. Persistent storage medium/media **506** can also be used to store device drivers, such as one or more of a digital camera driver, monitor driver, printer driver, scanner driver, or other device drivers, web pages, content files, playlists and other files. Persistent storage medium/media **506** can further include program modules and data files used to implement one or more embodiments of the present disclosure.

For the purposes of this disclosure a computer readable medium stores computer data, which data can include computer program code that is executable by a computer, in machine readable form. By way of example, and not limitation, a computer readable medium may comprise computer readable storage media, for tangible or fixed storage of data, or communication media for transient interpretation of codecontaining signals. Computer readable storage media, as used herein, refers to physical or tangible storage (as opposed to signals) and includes without limitation volatile and nonvolatile, removable and non-removable media implemented in any method or technology for the tangible storage of information such as computer-readable instructions, data structures, program modules or other data. Computer readable storage media includes, but is not limited to, RAM, ROM, EPROM, EEPROM, flash memory or other solid state memory technology, CD-ROM, DVD, or other optical storage, magnetic cassettes, magnetic tape, magnetic disk storage or other magnetic storage devices, or any other physical or material medium which can be used to tangibly store the desired information or data or instructions and which can be accessed by a computer or processor.

For the purposes of this disclosure a module is a software, hardware, or firmware (or combinations thereof) system, process or functionality, or component thereof, that performs or facilitates the processes, features, and/or functions described herein (with or without human interaction or augmentation). A module can include sub-modules. Software components of a module may be stored on a computer readable medium. Modules may be integral to one or more servers, or be loaded and executed by one or more servers. One or more modules may be grouped into an engine or an application.

Those skilled in the art will recognize that the methods and systems of the present disclosure may be implemented in many manners and as such are not to be limited by the foregoing exemplary embodiments and examples. In other words, functional elements being performed by single or multiple components, in various combinations of hardware and soft-

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ware or firmware, and individual functions, may be distributed among software applications at either the user device or server or both. In this regard, any number of the features of the different embodiments described herein may be combined into single or multiple embodiments, and alternate embodi- 5 ments having fewer than, or more than, all of the features described herein are possible. Functionality may also be, in whole or in part, distributed among multiple components, in manners now known or to become known. Thus, myriad software/hardware/firmware combinations are possible in 10 achieving the functions, features, interfaces and preferences described herein. Moreover, the scope of the present disclosure covers conventionally known manners for carrying out the described features and functions and interfaces, as well as those variations and modifications that may be made to the 15 hardware or software or firmware components described herein as would be understood by those skilled in the art now and hereafter.

While the system and method have been described in terms of one or more embodiments, it is to be understood that the 20 storing computer program instructions that, when executed disclosure need not be limited to the disclosed embodiments. It is intended to cover various modifications and similar arrangements included within the spirit and scope of the claims, the scope of which should be accorded the broadest interpretation so as to encompass all such modifications and 25 similar structures. The present disclosure includes any and all embodiments of the following claims.

What is claimed is:

- 1. A computing device comprising:
- a processor; and
- a medium storing instructions that, when executed by the processor, cause the computing device to:
  - provide a first plug-in module to a first client computer operated by a first user, the first plug-in module for 35 displaying a first user interface by a first web browser, the first web browser displaying web content to the first user on the first client computer, wherein the first user interface is separate from a main window of the first web browser, and wherein the first user interface 40 automatically selects a portion of the web content and displays the portion of the web content within the first user interface;
  - provide a second plug-in module to a second client computer operated by a second user, the second plug-in 45 module for displaying a second user interface by a second web browser on the second client computer. wherein the second user interface is separate from a main window of the second web browser;
  - receive a feed request from the second user via the sec- 50 ond user interface:
  - receive a submission associated with the web content from the first user via the first user interface;
  - determine that the submission is of interest to the second
  - in response to determining that the submission is of interest to the second user, transmit a feed to the second client computer to present the submission to the second user via the second user interface.
- 2. The computing device of claim 1, wherein the feed is 60 transmitted to the second client computer via a newsfeed
- 3. The computing device of claim 1, wherein the feed includes the submission; and the submission identifies web
- 4. The computing device of claim 1, wherein the submission includes at least one of a webpage, an idea, a comment,

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and a digital photograph; and the submission is stored in association with the web content.

- 5. The computing device of claim 1, wherein the submission is determined to be of interest to the second user based on an identification of the second user in the submission.
- 6. The computing device of claim 1, wherein the submission is determined to be of interest to the second user based on a tag of the web content with which the submission is associated.
- 7. The computing device of claim 1, wherein the submission is determined to be of interest to the second user based on a user to which the second user follows.
- 8. The computing device of claim 1, wherein the first user interface is presented in a pop-up window separate from the main window of the first web browser, and the second user interface is presented in a pop-up window separate from the main window of the second web browser.
- 9. A non-transitory computer readable storage medium by a server computer, cause the server computer to:
  - provide a first plug-in module to a first client computer operated by a first user, the first plug-in module for displaying a first user interface by a first web browser, the first web browser displaying web content to the first user on the first client computer, wherein the first user interface is separate from a main window of the first web browser, and wherein the first user interface automatically selects a portion of the web content and displays the portion of the web content within the first user interface;
  - provide a second plug-in module to a second client computer operated by a second user, the second plug-in module for displaying a second user interface by a second web browser on the second client computer, wherein the second user interface is separate from a main window of the second web browser;
  - receive a feed request from the second user via the second user interface:
  - receive a submission associated with the web content from the first user via the first user interface;
  - determine that the submission is of interest to the second user; and
  - in response to determining that the submission is of interest to the second user, transmit a feed to the second client computer to present the submission to the second user via the second user interface.
- 10. The medium of claim 9, wherein the first user interface is presented in a pop-up window separate from the main window of the first web browser, and the second user interface is presented in a pop-up window separate from the main window of the second web browser.
  - 11. A method, comprising:
  - providing, by a computing device, a first plug-in module to a first client computer operated by a first user, the first plug-in module for displaying a first user interface by a first web browser, the first web browser displaying web content to the first user on the first client computer, wherein the first user interface is separate from a main window of the first web browser, and wherein the first user interface automatically selects a portion of the web content and displays the portion of the web content within the first user interface;

providing, by the computing device, a second plug-in module to a second client computer operated by a second user, the second plug-in module for displaying a second user interface by a second web browser on the second

- client computer, wherein the second user interface is separate from a main window of the second web browser:
- receiving, by the computing device, a feed request from the second user via the second user interface;
- receiving, by the computing device, a submission associated with the web content from the first user via the first user interface:
- determining, by the computing device, that the submission is of interest to the second user; and
- in response to determining that the submission is of interest to the second user, transmitting, by the computing device, a feed to the second client computer to present the submission to the second user via the second user interface.
- 12. The method of claim 11, wherein the feed is transmitted to the second client computer via a newsfeed technique.
- 13. The method of claim 11, wherein the feed includes the submission; and the submission identifies web content.

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- **14**. The method of claim **11**, wherein the submission includes at least one of a webpage, an idea, a comment, and a digital photograph; and the submission is stored in association with the web content.
- **15**. The method of claim **11**, wherein the submission is determined to be of interest to the second user based on an identification of the second user in the submission.
- **16**. The method of claim **11**, wherein the submission is determined to be of interest to the second user based on a tag of the web content with which the submission is associated.
  - 17. The method of claim 11, wherein the submission is determined to be of interest to the second user based on a user to which the second user follows.
  - 18. The method of claim 11, wherein the first user interface is presented in a pop-up window separate from the main window of the first web browser, and the second user interface is presented in a pop-up window separate from the main window of the second web browser.

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